Chapter III

METHOD
Chapter -3

METHOD

This chapter discusses research methodology adopted for the present study. It is basically the plan and procedure that highlight the details of the work carried out by the researcher. This chapter also includes the variables in the study, research design followed by participant’s details. It furthermore discusses the procedure followed for developing the measuring instruments, and psychometric properties of all the measures, procedure of data collection and the statistical techniques adopted for analysis of the data.

Research design

The present study was intended to find out the impact of social network sites on academic performance, creativity, emotional maturity and play activities of adolescents. Hence, the descriptive survey research was applied. Descriptive survey research is probably the most frequently used mode of study in the social sciences. Typically, the researcher selects a sample of respondents from a certain population and administers standardized questionnaires/scales to them.

Participants.

The cluster random sampling technique was adopted for the study and assigned participants in to three groups based on the scores of Social network sites scale which included (N=200) High SNSs users Moderate SNSs users and (N=200) and (N=200) Low SNSs users.

A total of 900 students were administered with the questionnaire and based on the scores of social network usage scale they were divided into three groups of 200
samples each. i.e, those who score 74 to 107 in social network usage scale were considered as average users, those samples who scored 73 and below were considered as low users and those with 108 and above were considered as high users.

Group 1: Low SNS users (Scores in SNS: 73 and below)

Group 2: Average SNS users (Scores in SNS: 74 to 107)

Group 3: High SNS users (Scores in SNS: 108 and above).

**Table 3.1**: showing the distribution of the sample

<table>
<thead>
<tr>
<th></th>
<th>High SNS users</th>
<th>Moderate SNS users</th>
<th>Low SNS users</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>200</td>
<td>200</td>
<td>200</td>
<td>600</td>
</tr>
</tbody>
</table>

**Inclusion criteria**

a. Adolescents in the age group of 16 to 20.

b. Those who are regularly going to college and using social network sites were included.

c. Literate adolescents from urban region.

**Exclusion criteria**

d. Illiterates and rural adolescents.

e. Adolescents below age 16

f. Adolescents who are physically challenged are excluded for the present study
Measures

As per the requirement of the study, the following tools were employed:

- Information schedule
- Divergent production ability by Sharma.K.L (2005)
- Social network site usage scale (2015)
- Play activity scale (2015).

**Information schedule:** This schedule was developed to elicit the information detailed information regarding age, gender, class, place of birth, order of birth, and scholastic records which was collected with the help of class teachers and other demographic details.

**Emotional maturity scale (EMS):** Emotional Maturity Scale is constructed and standardized by Singh and Bhargava (1990). It contains 48 items under the five categories emotional instability, emotional regression, social maladjustment, personal disintegration, and lack of independence. It is a self-report measure of five-point rating with options namely very much, much, undecided, probably, and never weighted on 5, 4, 3, 2, 1 on the scale points. Items of the scale are in question form demanding information for each in any of the five options—‘very much’, ‘much’, ‘undecided’, ‘probably’, ‘never’. The scale was standardized on college students and the norms were established as—(50-80)—Extremely stable, (81-88)—Moderately stable, (89-106)—Unstable, and (107-240)—Extremely unstable. The highest the score on the scale is greater the degree of the emotional immaturity and vice-versa. The highest score of the Emotional Maturity Scale can be obtained 240 and lowest can be 48. The test-retest reliability of the scale was 0.75 and internal consistency of the scale was checked by calculating the coefficient of correlations between total scores and scores.
on each of the five areas i.e. emotional instability (.75), emotional regression (.63), social maladjustment (.58), personality disintegration (.86), lack of independence (.42). The scale was validated against external criteria i.e. the Gha (.64). This scale is meant for adolescents and adults

**Divergent production ability (DPA):** The Divergent production ability test is a battery of six tests like Word production, Uses of things, Similarities, Sentence construction, Uses Test, Titles and Elaboration which measures eight abilities like Word fluency, Ideational fluency, Associational fluency, Expressional fluency, Spontaneous flexibility, Adaptive flexibility, Originality and Elaboration. The raw scores of all the sub tests are converted into standard scores of a common mean to get a common SD, the respective standard scores of the raw scores of all the dimensions can be added to get creativity score. The test has the test-retest reliability of 0.67, 0.80, 0.68, 0.84, 0.85 and 0.82 for Word production, Uses of things, Similarities, Sentence construction, Uses Test, Titles and Elaboration respectively and the test is correlated with Baqer Mehdi’s test of creative thinking to check the validity (Sharma.K.N; 2005).

The content validity has been ensured by the consistent and deliberate effort made by the author to use the test stimuli, test tasks, instructions and scoring procedures based on the test theory and researches available on creativity or divergent production abilities, or creative thinking abilities.

The raw score of all the tests cannot be added directly to get creativity scores because of greater variations in the score incomparability; their domains and approaches are different. Therefore the raw scores received for all the dimensions should be converted into standard scores. The respective standard scores of the raw
scores of all the dimensions can be added to get creativity score or the mean values of those standard scores of all the eight dimensions be added to get the creativity score.

**Social network site usage scale (SNsUS):** The social network site usage scale consists of 31 items with 5-point rating self report scale which measures level of social network sites usage. After a thorough discussion with experienced persons and consulting relevant literature, total eighty statements were developed given to the experts to collect their opinions. The items which were chosen by 75 percent and more were spotted out. The final form of the scale compromised of 31 items. Principal component analysis method was used to analyze the factors and it was found that this scale indicated a total variance of 78.53 and the Cronback’s Alpha reliability of 0.87 which indicates high reliability, hence this scale can be considered as reliable and data obtained from the this scale will be trustworthy.

Besides face validity as all items of the scale are concerned with the variable under focus, the scale has high content validity. It is evident from the assessment and rating of the judges/experts that items of the scale are directly related to the concept of social network sites usage.

The appropriate norm was developed and this norm should be regarded as reference point for interpreting the scores of social network sites usage. However, norms are based on the sample drawn from Bangalore district. The minimum scores of a subject on this scale will be 31 and the maximum possible scores will be 155. The Scores lying within 74 to 107 would represent especially “average” social network usage and they were considered as average users, those samples who scored 73 and below were considered as low users and those with 108 and above were considered as high users.
Play activity scale: The play activity scale consists of 15 items with 3 main components such as indoor play activities, outdoor play activities and online play activities. This scale intends to measure the type of play activities in which he or she involves more. After a thorough discussion with experienced persons in the concerned field and consulting relevant literature, total fifty five statements were developed and given to the experts to collect their opinions on the face validity. The items which were chosen by 75 percent and more were spotted out. The final form of the scale compromised of 15 items. Principal component analysis method was used to analyze the factors and it was found that this scale indicated a total variance of 70.54 and the Cronback’s Alpha reliability of 0.78 which indicates high reliability, hence this scale can be considered as reliable and data obtained from the this scale will be trustworthy to measure indoor play activities, outdoor play activities and online play activities of adolescents.

Besides face validity as all items of the scale are concerned with the variable under focus, the scale has high content validity. It is evident from the assessment and rating of the judges/experts that items of the scale are directly related to the concept of indoor play activities, outdoor play activities and online play activities.

The appropriate norm was developed and these norms should be regarded as reference point for interpreting the scores of indoor play activities, outdoor play activities and online play activities. However, norms are based on the sample drawn from Bangalore district. The raw score of all the tests cannot be added directly to get play activities score because of greater variations in the score uncooperatively; their domains and approaches are different. Therefore, the raw scores received for all the
dimensions should be converted into standard scores of a common mean and a common S. D.

The above tools were administered to sampled adolescents. The responses thus collected were scored and subjected to statistical procedures using SPSS Package.

Procedure

The study was conducted in two phases, i.e., Pilot study and the main study.

Phase one - Pilot study

The pilot study was conducted on a sample of 50 adolescents aged between 16-20 years from different colleges of Bangalore city, to check the feasibility of the scales. To meet the objective of the present study 2 scales Social network sites usage scale and play activity scale was developed by the researcher. The results of the pilot study helped in incorporating the necessary changes and re-structuring the scale.

Phase two – Main study

The Information schedule, SNSs scale, play activity scale, emotional maturity scale and Divergent production ability tests were administered as group test on 900 samples of selected colleges of Bangalore city which accorded permission to conduct research.

Among 900 samples 600 samples were selected based on the social network sites usage scale scores and divided into 3 groups on the basis of mean score considered as Average group, and +1 SD as High SNS users and –1 SD score as Low users.
The natures of questionnaires were explained to the subjects and were assured with confidentiality. Researcher clarified the doubts of the subjects where they found difficulty in comprehending. In order to assess the academic performance of the participants the forthcoming examination results were collected with the help of their respective class teachers.

Scoring of all the scales, used for research purpose in the present study was done by the investigator, keeping in view the norms according to the manual of the scale under the guidance of supervisor.

**Statistical Techniques Employed**

The collected data was analyzed keeping in view the objectives and design of the study. The data was analyzed by using SPSS Package. The following statistical techniques were employed for analysis the data:

1. Descriptive statistics such as Means and Standard Deviations, Graphs were worked out to summarize and describe the nature of data.
2. In order to find out the significant mean differences among three groups belongs to low SNS users, Average SNS users and High SNS users on academic performance, creativity, emotional maturity and play activities a one way ANOVA is calculated.
3. Further, to examine the pair wise contrast between all the possible comparisons a tukey’s post-hoc test is calculated.

**Sum-up**

This method chapter was concerned with the plan and procedure of the research carried out by the researcher. The research variables with operational
definitions and design were explained in detail by referring to the participants. The
procedure adopted to develop measuring instruments and psychometric properties of
other measures, procedure of data collection and scoring were also discussed. It
furthermore discussed the statistical techniques employed for the analysis of the data.
The next chapter will cover the results and discussion of the study.